

ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

Title of Invention	Lignocellulose-based anion-adsorbing medium (LAM) and process for making and using same for the selective removal of phosphate and arsenic anionic contaminants from aqueous solutions.
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Application Number :

Confirmation Number:

First Named Applicant: Ju Young Kim

Attorney Docket Number: KIM-001USP

Art Unit:

Examiner:

Search string: (1297028 or 3872002 or 3903074 or 3931003 or 4200735 or 4432921 or 4869735 or 4869735 or 5314638 or 5411569 or 5411569 or 5492759 or 5492723 or 5736064 or 5907037 or 6042731 or 6143692 or 6217942 or 6318021 or 6342191 or 6409978).pn

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
<i>l.c.</i>	1	1297028	1919-03-11	Soraas	—	530	500
<i>l.c.</i>	2	3872002	2005-03-18	Musgrove	—	210	711
<i>l.c.</i>	3	3903074	1975-09-02	Van Reesema	—	536	31
<i>l.c.</i>	4	3931003	1976-01-06	Jorgensen	—	210	669
<i>l.c.</i>	5	4200735	1980-04-29	Sano et al.	—	536	30
<i>l.c.</i>	6	4432921	1984-02-21	Haars et al.	—	264	109
<i>l.c.</i>	7	4869735	1989-09-26	Miyazawa et al.	—	95	133
	8	4869735	1991-09-03	Chen et al.			
<i>l.c.</i>	9	5314638	1994-05-24	Morine et al.	—	252	184
<i>l.c.</i>	10	5411569	1995-05-02	Hjersted	—	71	24
	11	5411569	1995-09-05	Michalewski et al.			
<i>l.c.</i>	12	5492759	1996-02-20	Eriksson et al.	—	428	375
<i>l.c.</i>	13	5492723	1996-02-20	Sanderson et al.	—	427	244
<i>l.c.</i>	14	5736064	1998-04-07	Edamura et al.	—	252	74
<i>l.c.</i>	15	5907037	1999-05-25	Gujral et al.	—	536	59
<i>l.c.</i>	16	6042731	2000-03-28	Bonniin	—	210	679
<i>l.c.</i>	17	6143692	2000-01-07	Sanjay et al.	—	502	401
<i>l.c.</i>	18	6217942	2001-04-17	Bolle et al.	—	427	385.5
<i>l.c.</i>	19	6318021	2001-11-20	Whiteley	—	47	9

I. Cintis

October 29, 2006

L.C.	20	6342191	2002-01-29	Kepner et al.	—	423	210
L.C.	21	6409978	2002-06-25	Faulkner et al.	—	423	1

Signature

Examiner Name	Date
E. C. Intins	October 29, 2006

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	1	of	4
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Complete if Known

Application Number	10/708001
Filing Date	31 January 2004
First Named Inventor	Ju Young Kim
Art Unit	
Examiner Name	
Attorney Docket Number	KIM-001USP

U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ *Number ⁴ *Kind Code ⁵ (if known)				
L.C.	1	DT 24 27 425 A1	06-09-1973	Yuken		
L.C.	2	DT 27 08 974 A1	03-04-1976	Dev Finance Crp		
L.C.	3	DD 270 704 A1	04-18-1988	Akad Wiss DDR		
L.C.	4	DD 286 805 A5	08-11-1989	VEB Funka Kopen		
L.C.	5	J5 7019 -98	07-07-1980	Ebara Infilco		
L.C.	6	JP363023934A	02-01-1988	Toyo Roshl		

**Examiner
Signature**

I. Continis

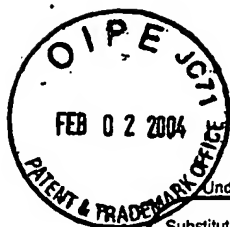
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First Named Inventor	Ju Young Kim
Art Unit	
Examiner Name	
Attorney Docket Number	KIM-001USP

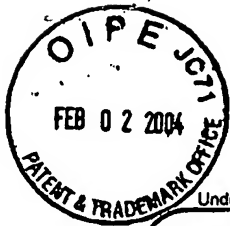
NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
l.c.	11	UNNITHAN et al., Ability of Iron (III)-loaded carboxylated polyacrylamide-grafted sawdust to remove phosphate ions from aqueous solution and fertilizer industry wastewater: adsorption kinetics and isotherm studies. J. Applied Polymer Science, Vol. 84, 2541-2553 (2002).	
l.c.	12	WIGGINTON and LENHART, Using Iron-infused media and stormfilter technology for the removal of dissolved phosphorus from stormwater discharges. Unpublished manuscript.	
l.c.	13	STORMWATER INC. brochure entitled, Storm Filter.	
l.c.	14	URANO et al., Process development for removal and recovery of phosphorus from wastewater by a new adsorbent. 1. preparation method and adsorption capability of a new adsorbent. Ind. Eng. Chem. Res. 1991, 30:1893-1896.	
l.c.	15	URANO et al., Process development for removal and recovery of phosphorus from wastewater by a new adsorbent. 3. Desorption of phosphate and regeneration of adsorbent. Ind. Eng. Chem. Res. 1992, 31:1510-1513.	
l.c.	16	URANO et al., Process development for removal and recovery of phosphorus from wastewater by a new adsorbent. 4. Recovery of phosphate and aluminum from desorbing solution. Ind. Eng. Chem. Res. 1992, 31:1513-1515.	
l.c.	17	BAKER et al., Laboratory development of permeable reactive mixtures for the removal of phosphorus from onsite wastewater disposal systems. Environ. Sci. Technol. 1998 32: 2308-2316.	
l.c.	18	MUNOZ et al., Arsenic adsorption by Fe(III)-loaded open-celled cellulose sponges. Thermodynamic and selectivity aspects. Environ. Sci. Technol. 2002 36:3405-3411.	
l.c.	19	SUVASIS et al., Coparison of arsenic (V) and arsenic (III) sorption onto iron oxide minerals: implications for arsenic mobility. Environ. Sci. Technol. 2003, 37: 4182-4189.	
l.c.	20	MYERS et al., Iron oxide sink method for extracting soil phosphorus: paper preparation and use. Soil Sci. Soc. Am. J. 61: 1400-1407 (1997).	

Examiner Signature	I. Cinfins	Date Considered	10/29/06
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		Application Number	10/708001
		Filing Date	31 January 2004
		First Named Inventor	Ju Young Kim
		Art Unit	
		Examiner Name	
Sheet 4	of 4	Attorney Docket Number	KIM-001USP

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
I.C.	21	URANO et al., Process development for removal and recovery of phosphorus from wastewater by a new adsorbent. 1. preparation method and adsorption capability of a new adsorbent. Ind. Eng. Chem. Res. 1991, 30: 1893-1896.	
I.C.	22	DEAE-DEXTRAN, data file from Amersham Biosciences. df 18-1151-76 AA, 2001-11, pp 1-4.	

Examiner Signature	<i>I. Continis</i>	Date Considered	10/29/06
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